### Keeping Virginia Competitive



Governor's Commission on Higher Education Reform, Innovation and Investment

July 12, 2010

Richmond, Virginia



National Center for Higher Education Management Systems 3035 Center Green Drive, Suite 150 Boulder, Colorado 80301

### WHY HIGHER EDUCATION MATTERS

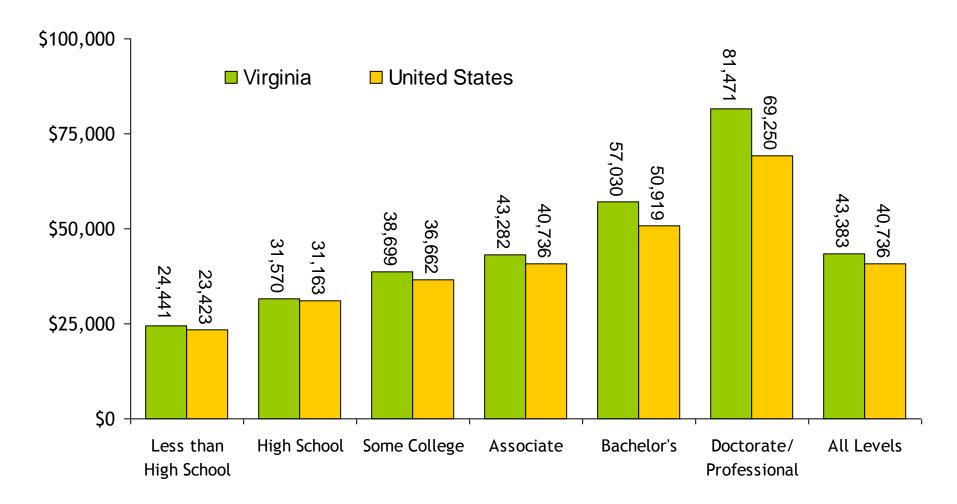


## Percent of Civilians Age 25-64 Not Participating in the Workforce—By Education Attainment, 2006

	<u>U.S.</u>	<u>Virginia</u>
Less than High School	39.2	38.5
High School Graduate	25.1	23.1
Some College, No Degree	20.9	20.0
Associate Degree	16.9	16.8
Bachelor's Degree	15.7	15.7
Graduate or Professional Degree	13.6	12.2

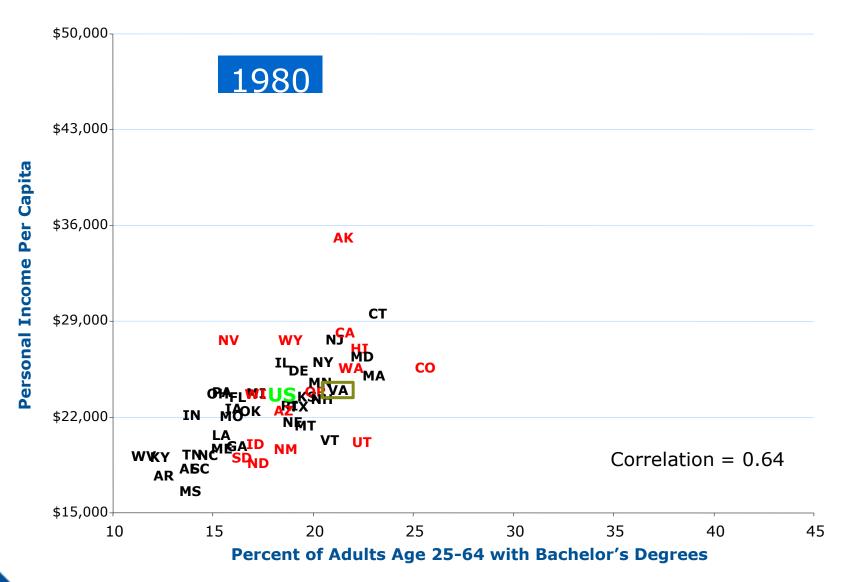


### Median Earnings by Degree Level, 2008

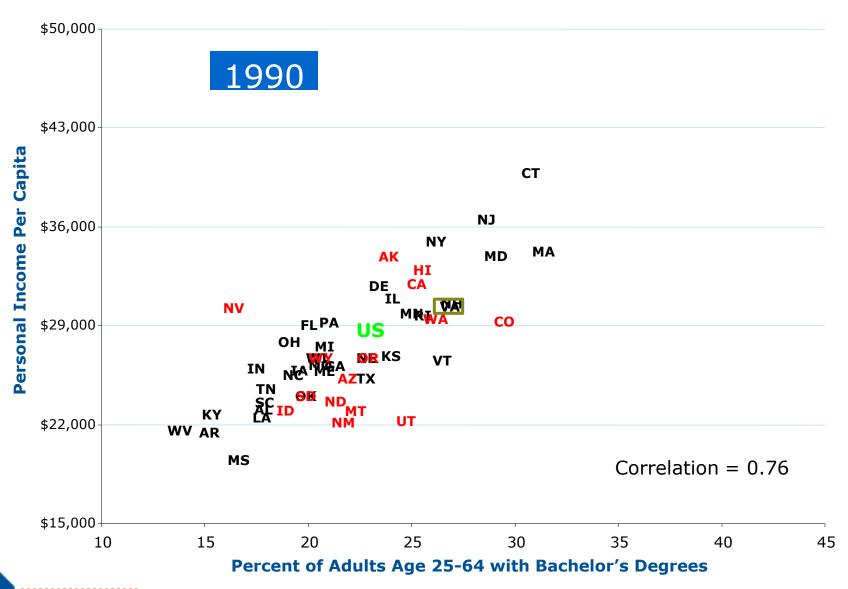




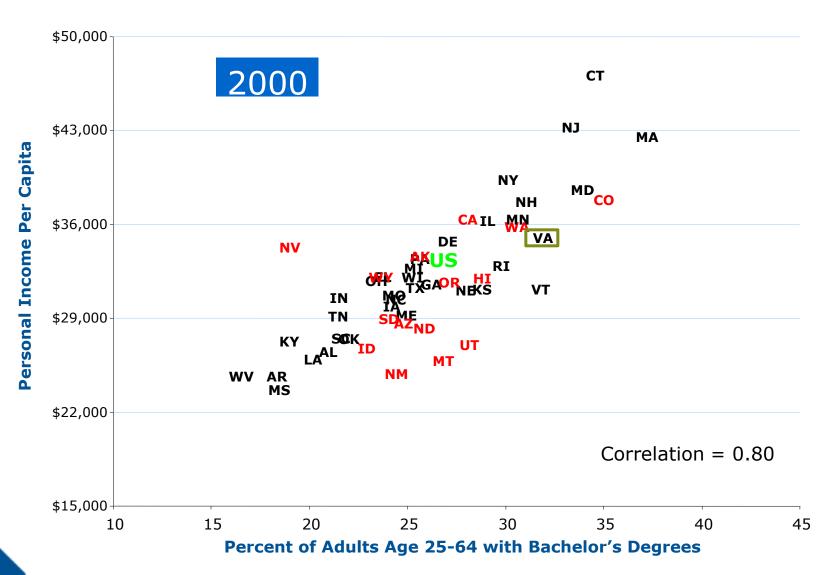
Source: U.S. Census Bureau, 2008 American Community Survey PUMS File. Note: Figures for population age 25-64 with positive wages working 35+ hours per week.

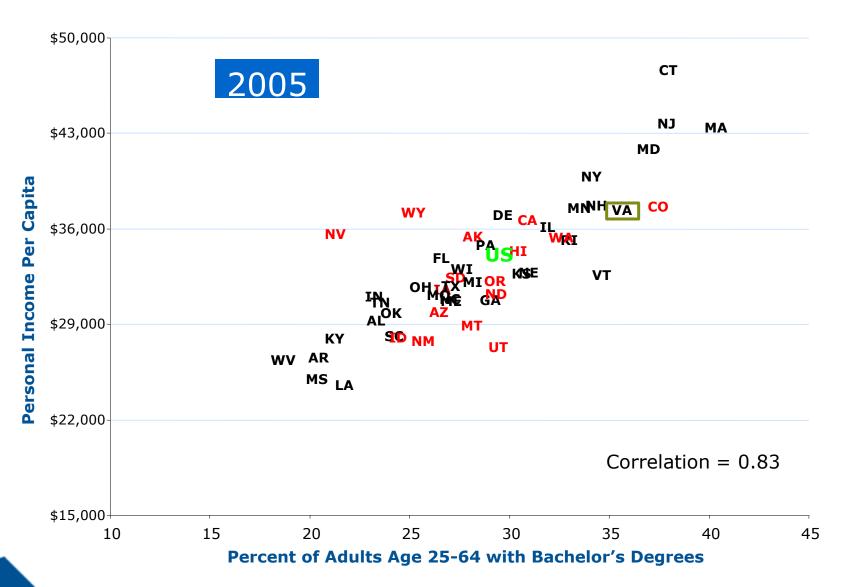




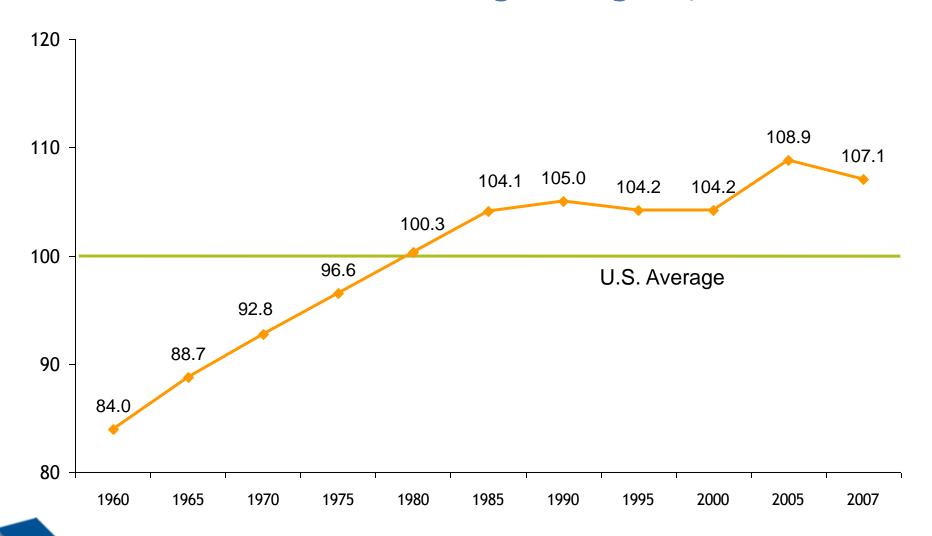






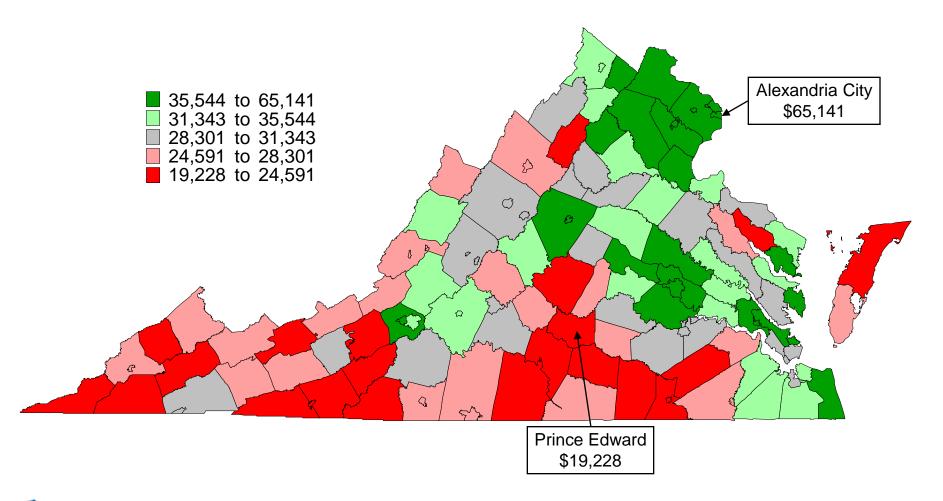


# Per Capita Personal Income as a Percent of U.S. Average—Virginia, 1960-2007





### Virginia Per Capita Personal Income, 2006





### Increasing Levels of Education Attainment Lead to Improved Societal Outcomes

- Increased levels of workforce participation
- Decreased rates of incarceration
- Improved health outcomes
- Reduced participation in Medicaid and other social service programs
- Greater participation in artistic, cultural, and civic pursuits
- Higher levels of volunteerism and social engagement



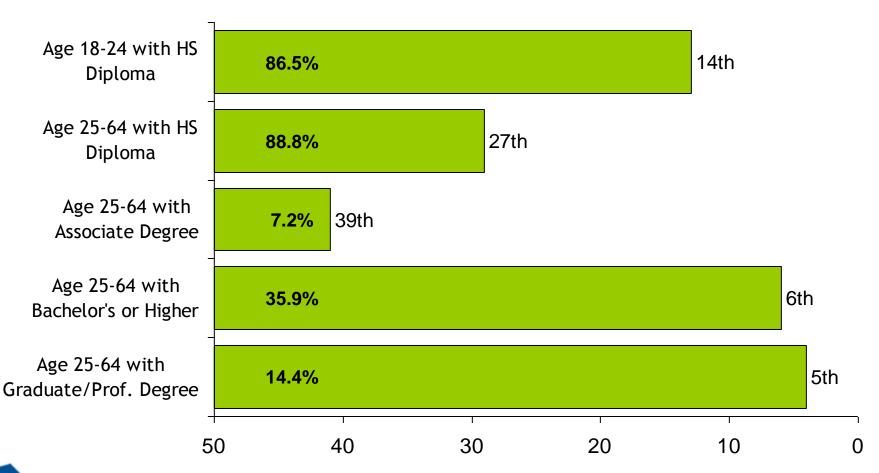
### How Virginia Compares

- Education attainment of the workforce
- Research competitiveness
- Funding of higher education
- Productivity of the State's higher education system

# EDUCATION ATTAINMENT OF THE WORKFORCE

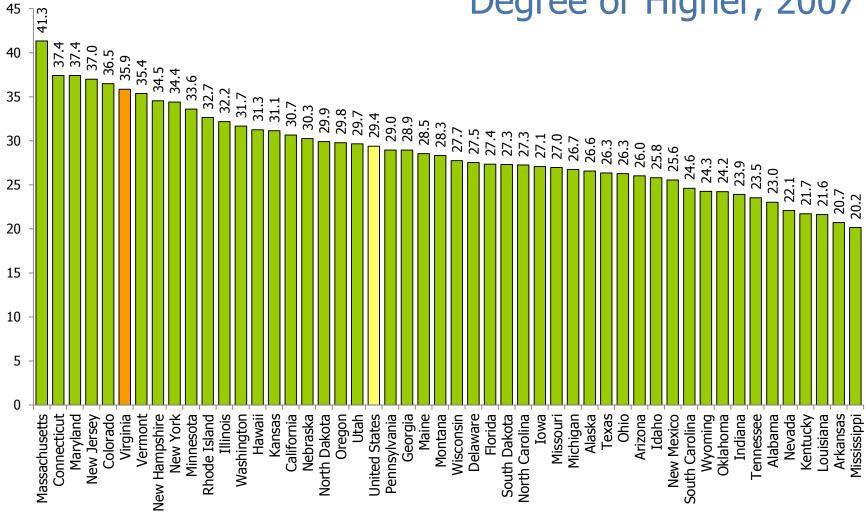


## Educational Attainment and Rank Among States Virginia, 2007 (Percent)



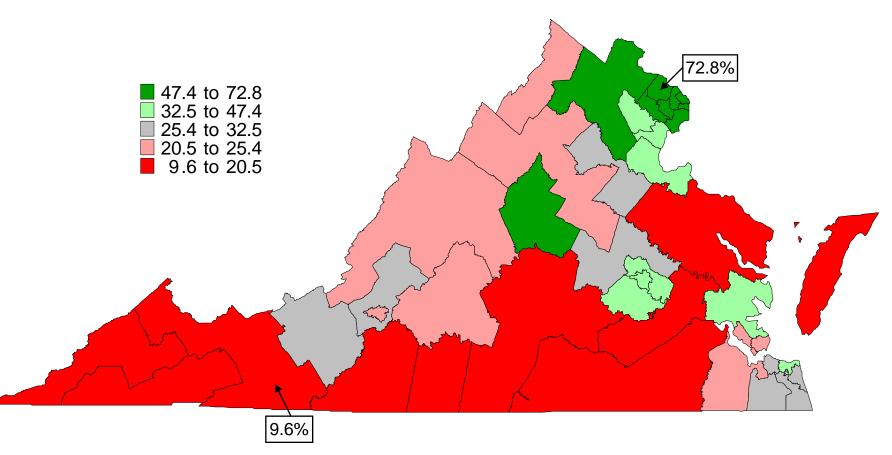


## Percent of Population Ages 25-64 with a Bachelor's Degree or Higher, 2007

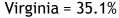




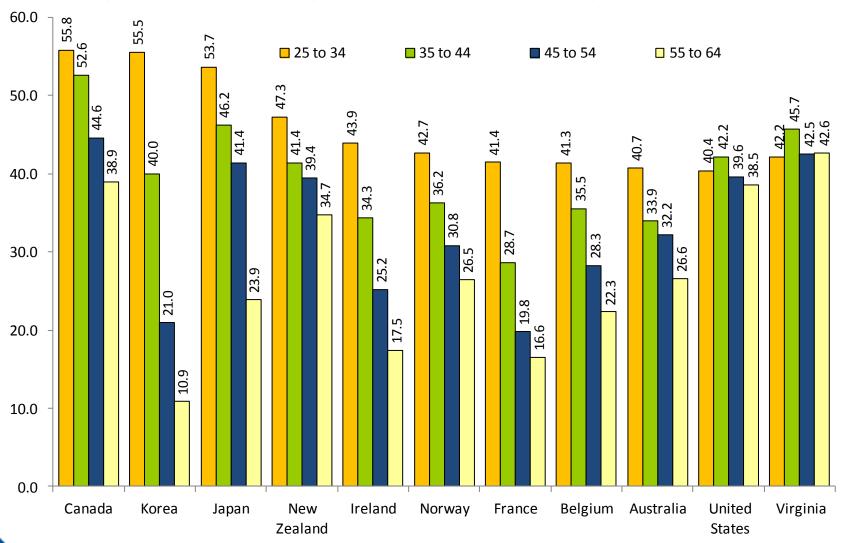
# Percent of Virginia Population Age 25-64 with a Bachelor's Degree or Higher, 2006



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## Percent of Adults with an Associate Degree or Higher by Age Group – Virginia, U.S. & Leading OECD Countries



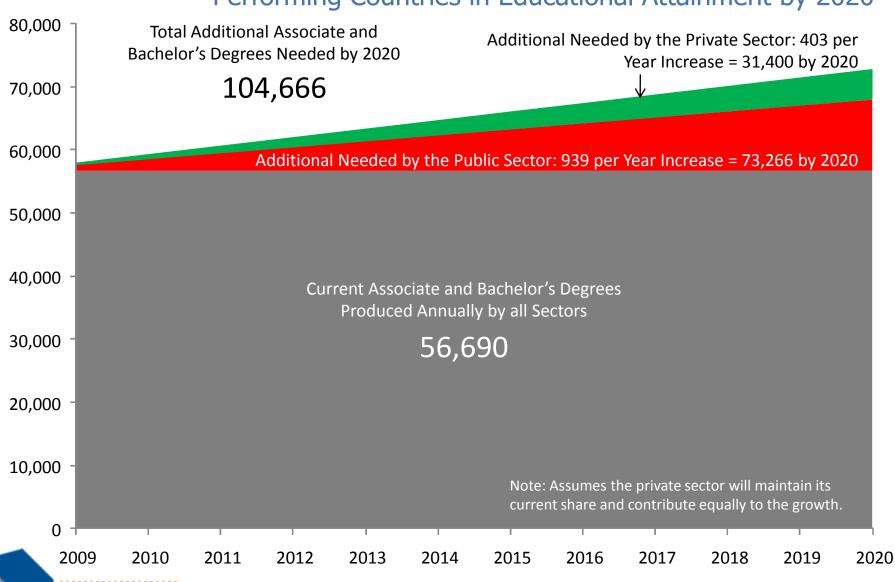


### Matching Best-Performing Countries by 2020

(Associate and Higher)

Gap: Additional Degrees (Associate and Bachelor's) Needed by 2020	
Degrees Produced at Current Annual Rate by 2020	
Maintaining Recent Annual Net Migration of College Degree Holders	
25 to 52 Year Olds with College Degrees (Who will Still be in the Cohort in 2020)	1,357,135
Educational Attainment Needed to Match Best-Performing Countries (Assoc and Higher) 51%	
Projected 25 to 64 Year Olds in 2020	4,573,930

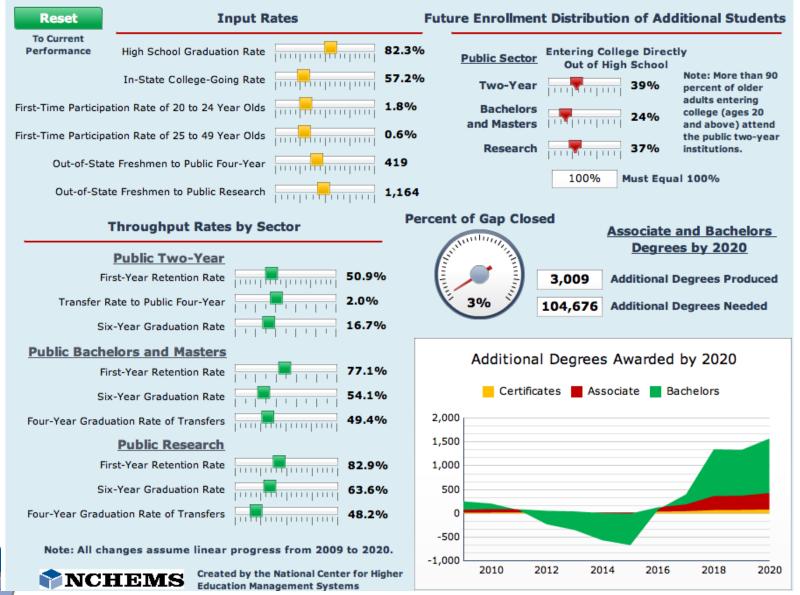
#### Additional Degree Production Needed for Virginia to Match Best Performing Countries in Educational Attainment by 2020





#### Virginia's Student Flow Model – Gauging Improved Performance to 2020

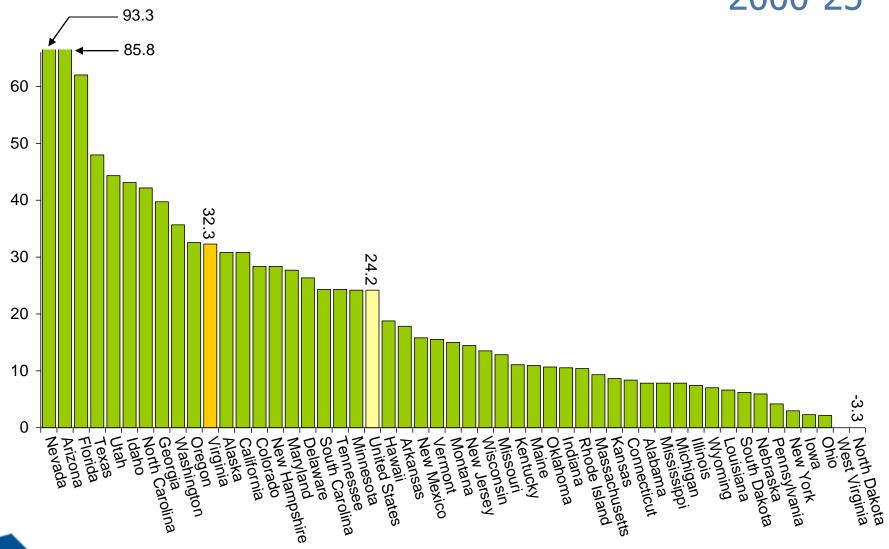
#### A Model for Exploring Educational Attainment Solutions



# CONDITIONS AFFECTING EFFORTS TO IMPROVE EDUCATION ATTAINMENT



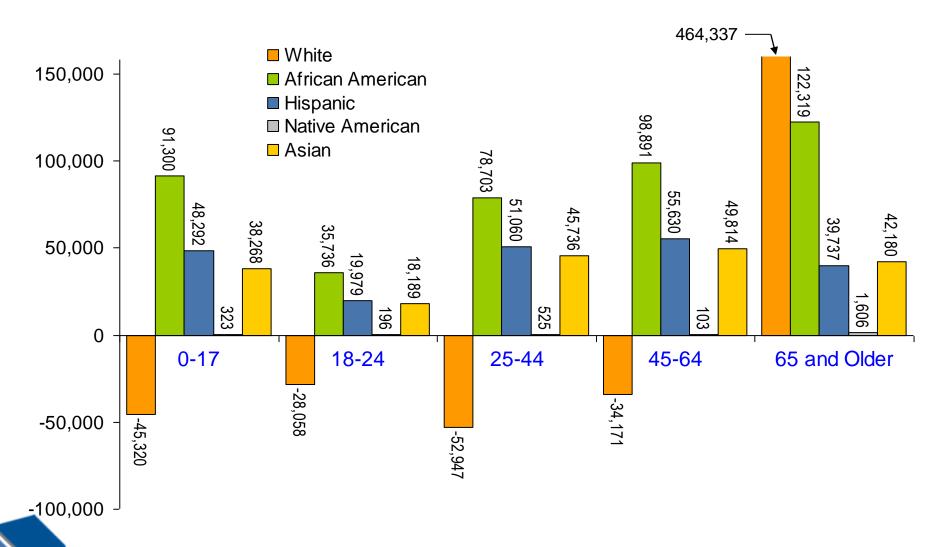
## Population Projections, Percent Change 2000-25





Source: U.S. Census Bureau

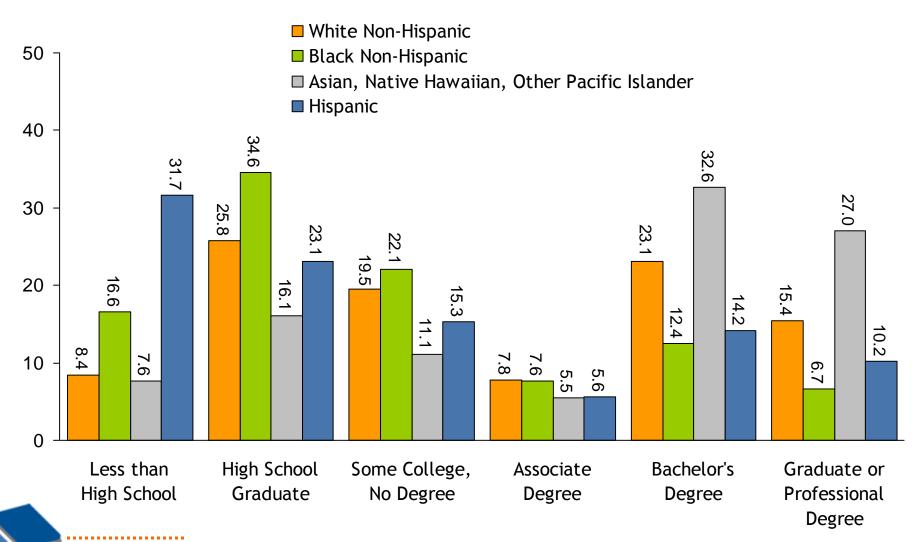
# Projected Change in Virginia Population by Age and Race/Ethnicity, 2005-25 (in Thousands)



Source: U.S. Census Bureau

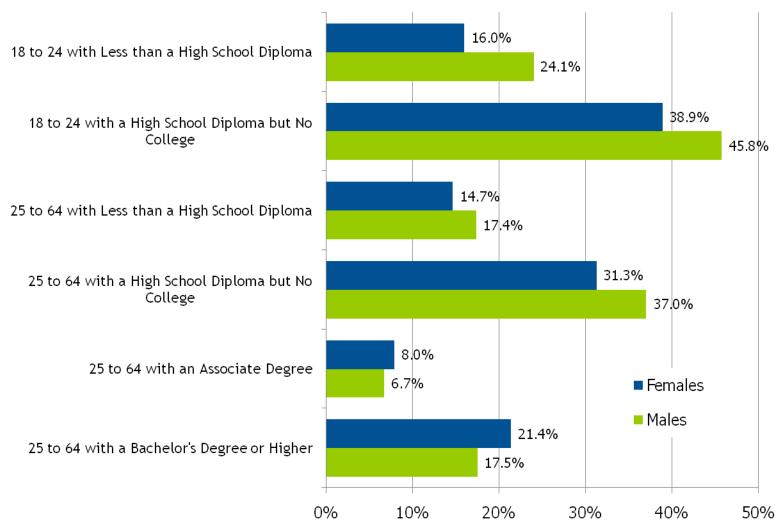


## Percent Educational Attainment of Population Age 25-64 by Race/Ethnicity, Virginia, 2006



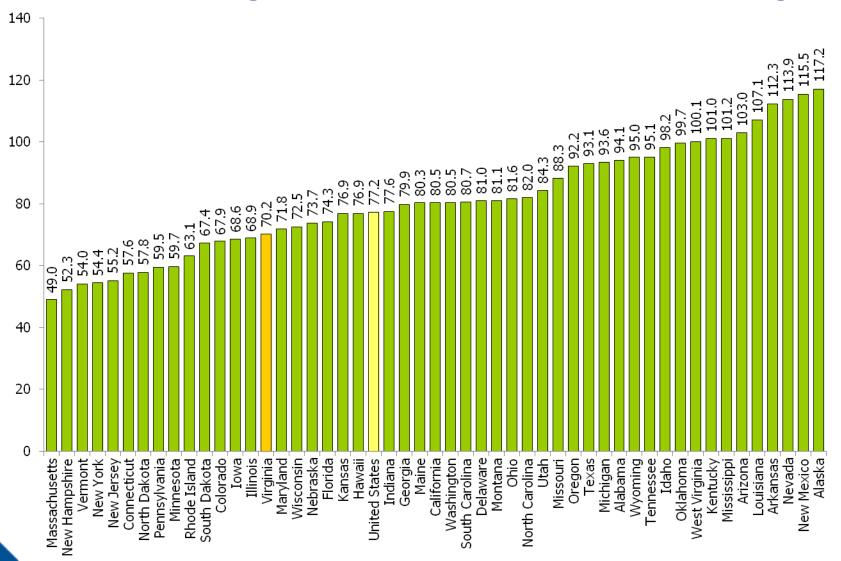


#### Educational Attainment for Blacks by Gender 2005-06

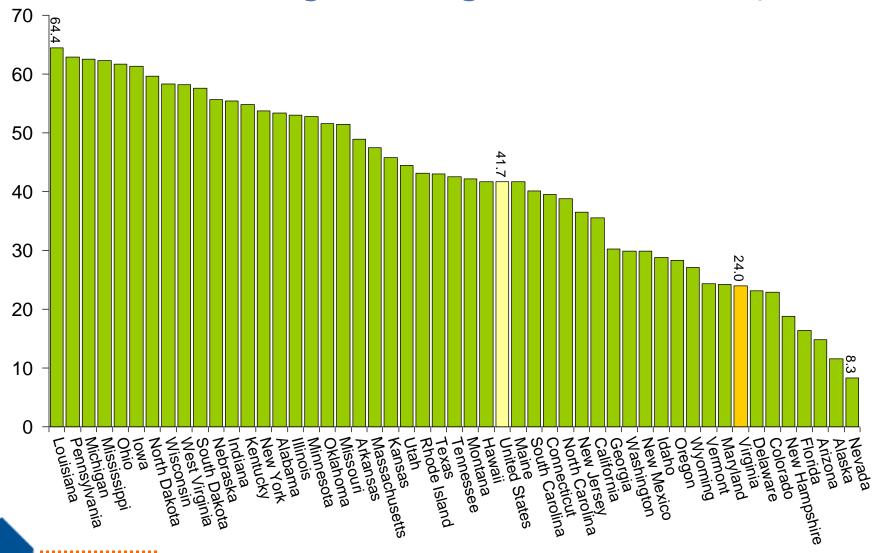




### Residents Aged 25 to 44 with Some College, No Degree as a Percentage of those with Associate and Bachelor's Degrees



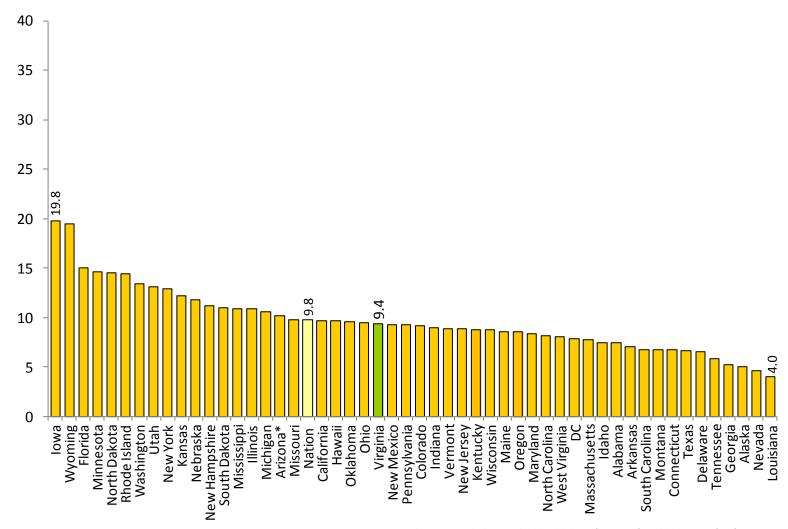
## Percent of Residents Age 25-64 with a Bachelor's Degree or Higher Born In-State, 2005

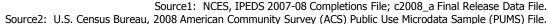




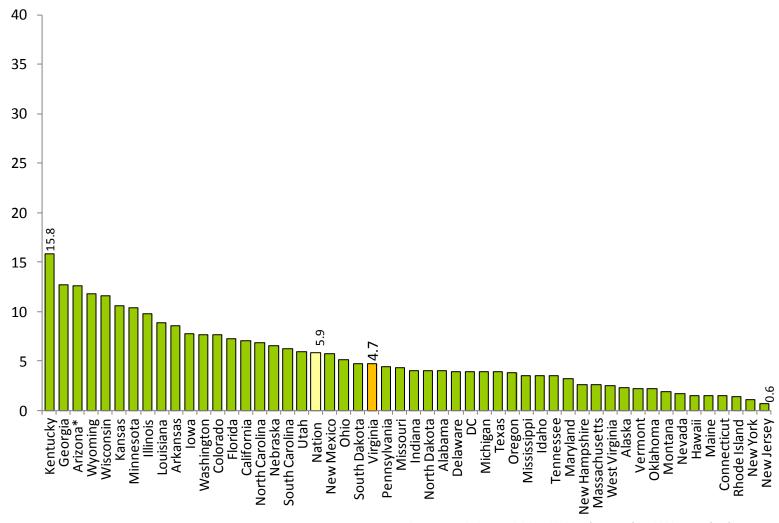
Source: 2005 ACS

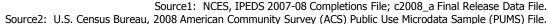
## Associate Degrees Awarded at All Colleges per 1,000 Adults Age 18-44 with No College Degree, 2008



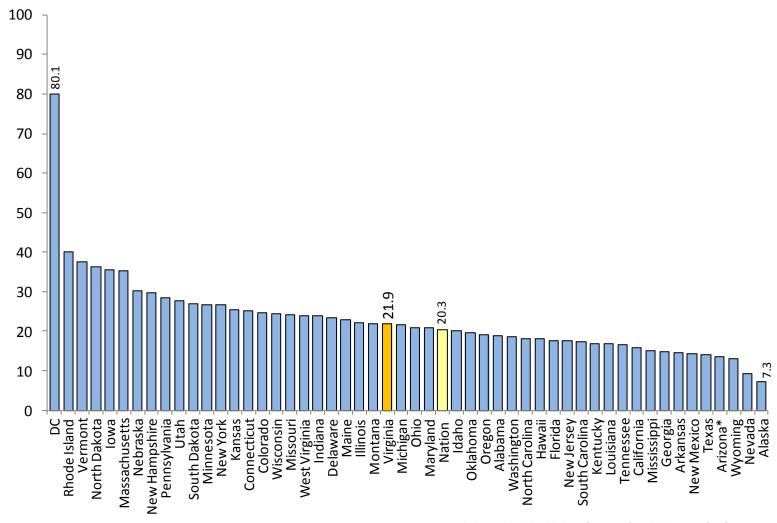


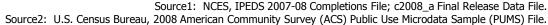
## Certificates Awarded at All Colleges per 1,000 Adults Age 18-44 with No College Degree, 2008





## Bachelor's Degrees Awarded at All Colleges per 1,000 Adults Age 18-44 with No College Degree, 2008

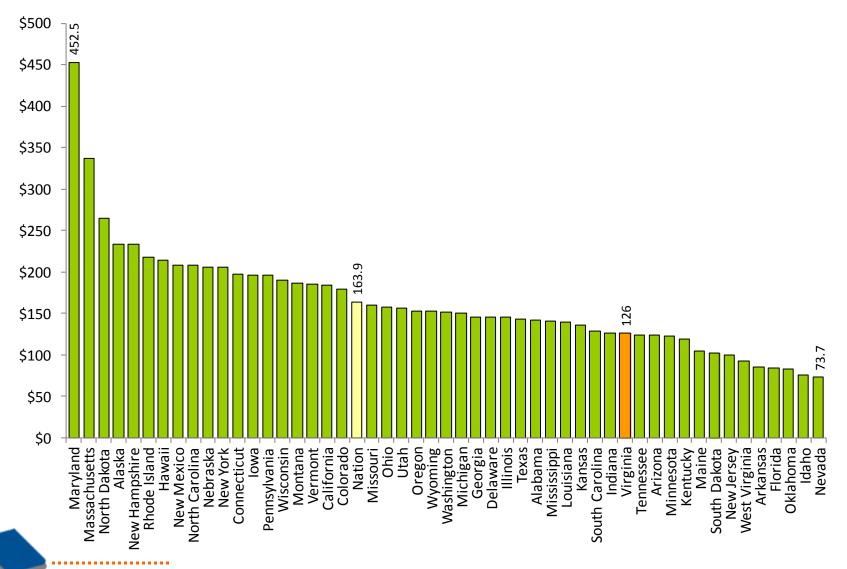




### **RESEARCH COMPETITIVENESS**



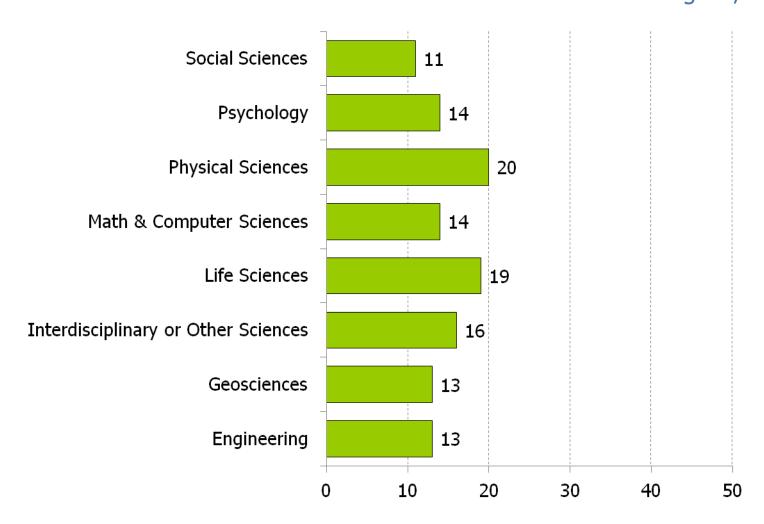
### Total R&D Expenditures Per Capita, 2007





Source: National Science Foundation; U.S. Census Bureau

## Ranking: Federal R&D Expenditures by Discipline Virginia, 2007





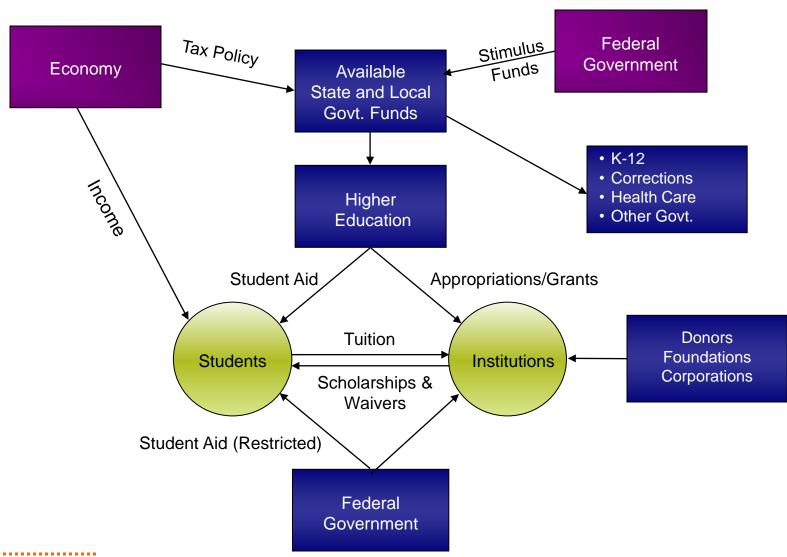
Virginia Ranks 12<sup>th</sup> in Population

Source: National Science Foundation; http://webcaspar.nsf.gov/index.jsp

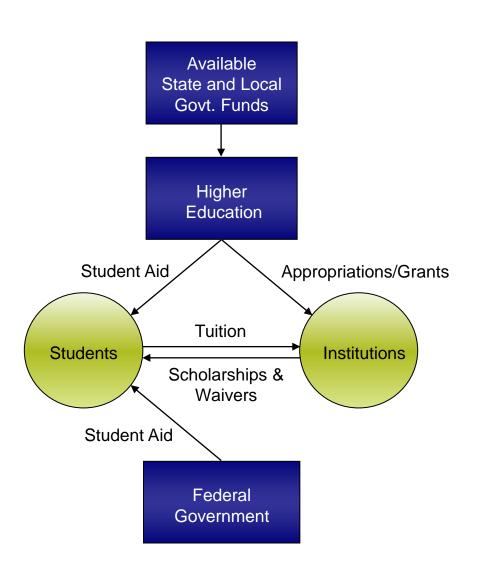
### **FUNDING OF HIGHER EDUCATION**



#### The Flow of Funds



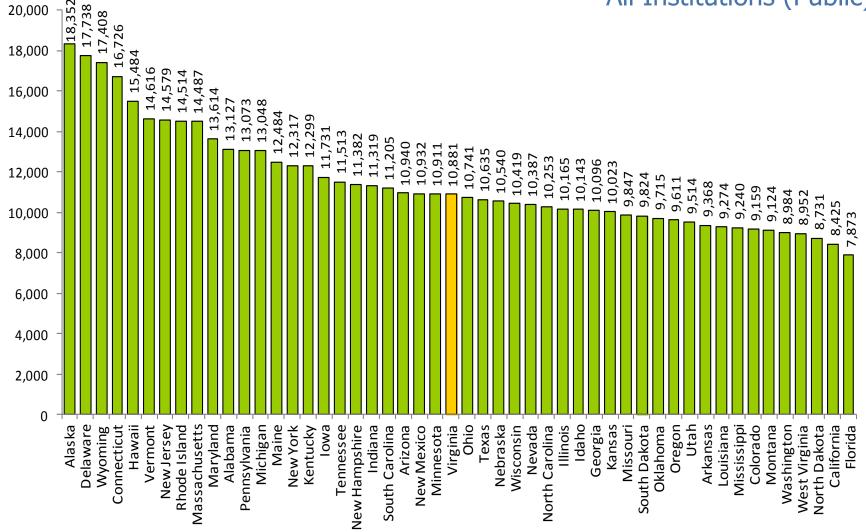
### The Flow of Funds



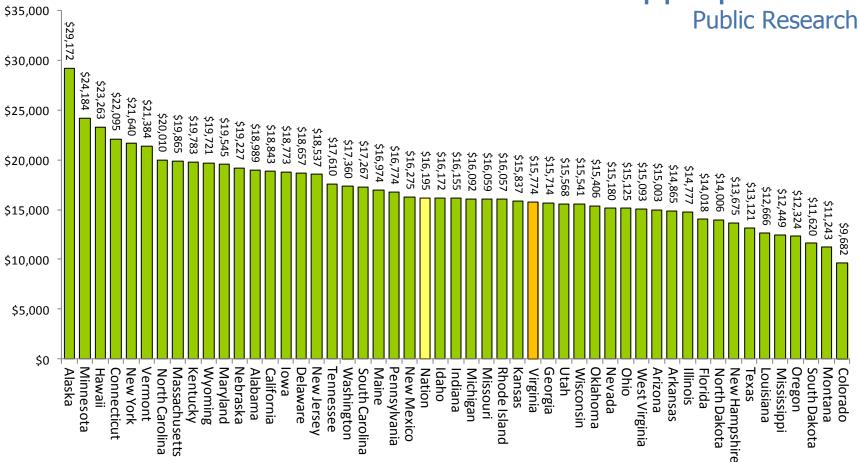
### A Reality Facing Higher Education

- Employment recovery lags fiscal recovery
- State tax collections lag employment recovery
- Funding for higher education lags state tax revenues recovery

### State/Local Funding plus Tuition Revenue per FTE Student All Institutions (Public)



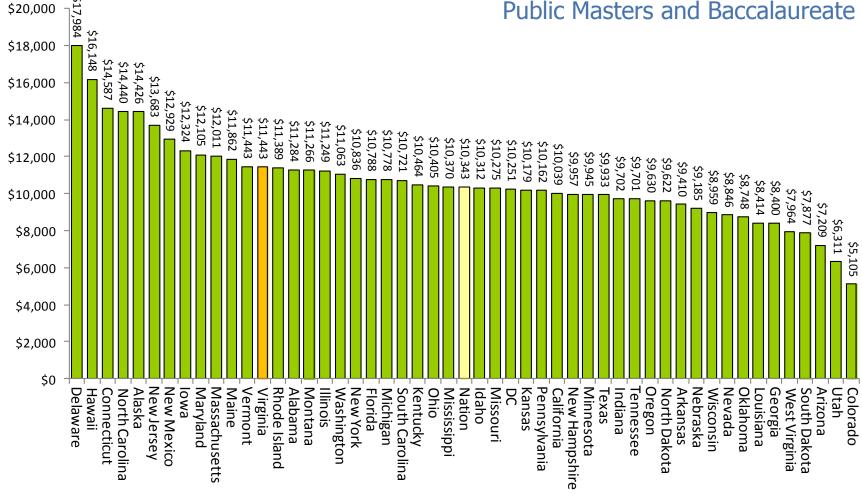
# Revenues Per Student from Net Tuition, State, & Local Appropriations





### Revenues Per Student from Net Tuition, State, & **Local Appropriations**

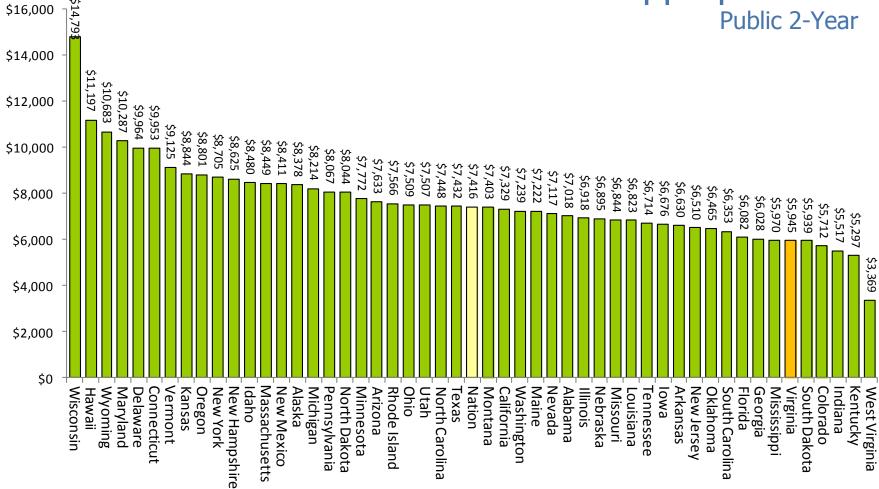
**Public Masters and Baccalaureate** 





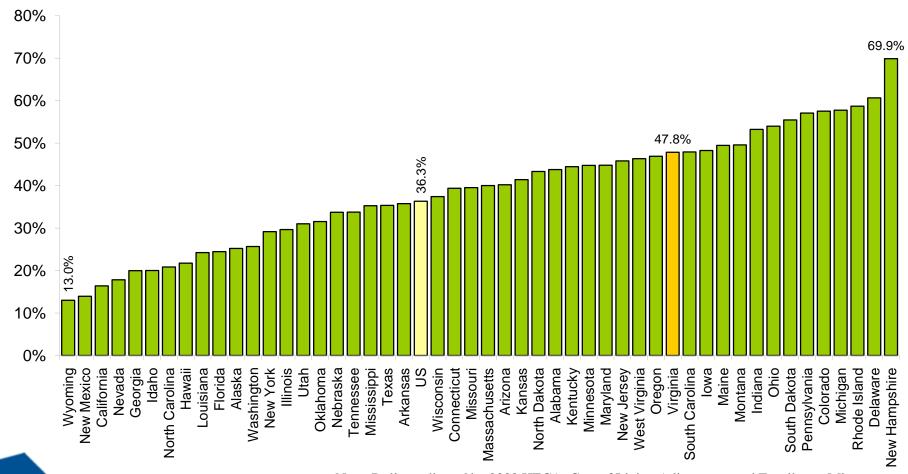
Sources: NCES, IPEDS 2006-07 Finance Files; f0607\_f1a and f0607\_f2 Final Release Data Files. NCES, IPEDS 2007-08 Institutional Characteristics File; hd2007 Final Release Data File. NCES, IPEDS 2006-07 Enrollment Files; ef2006a, effy2007, and efia2007 Final Release Data Files.

## Revenues Per Student from Net Tuition, State, & Local Appropriations





### Net Tuition as a Percent of Public Higher Education Total Educational Revenue by State, FY 2008

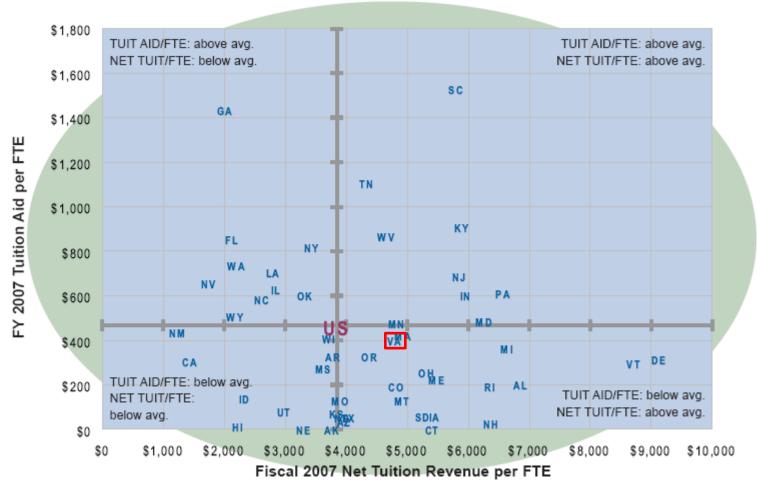


Note: Dollars adjusted by 2008 HECA, Cost of Living Adjustment, and Enrollment Mix

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Source: SHEEO SHEF

## Net Tuition Revenue per FTE and State-Funded Tuition Aid per FTE, FY2007 (Public Institutions only)



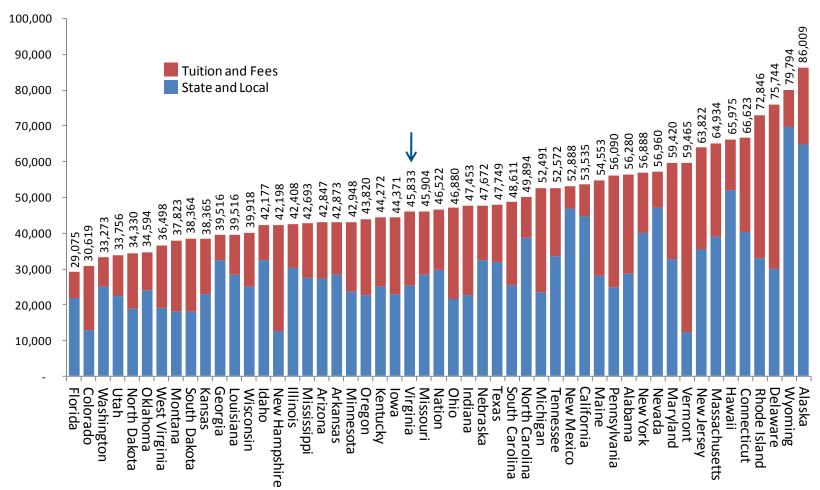


### PRODUCTIVITY AS AN ISSUE



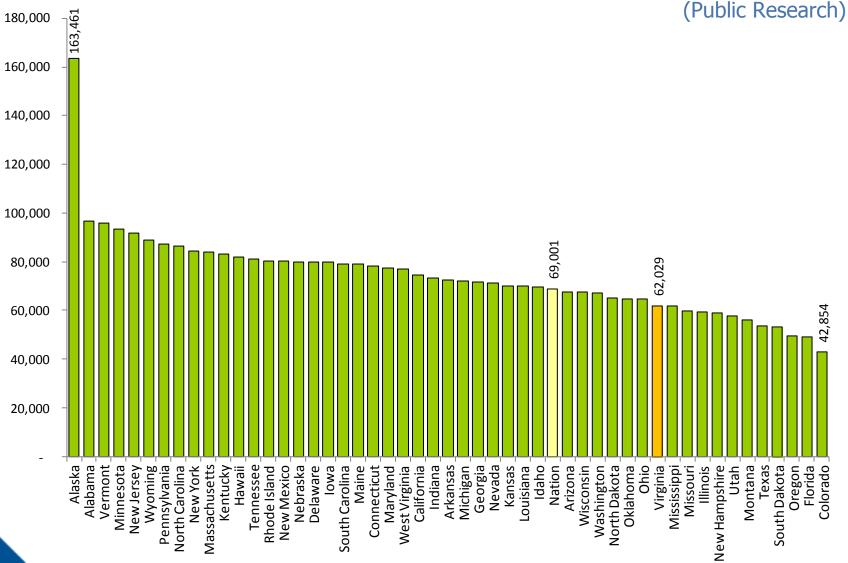
### Productivity: Total Funding per Degree/Certificate

(Weighted\*, 2006-2007)

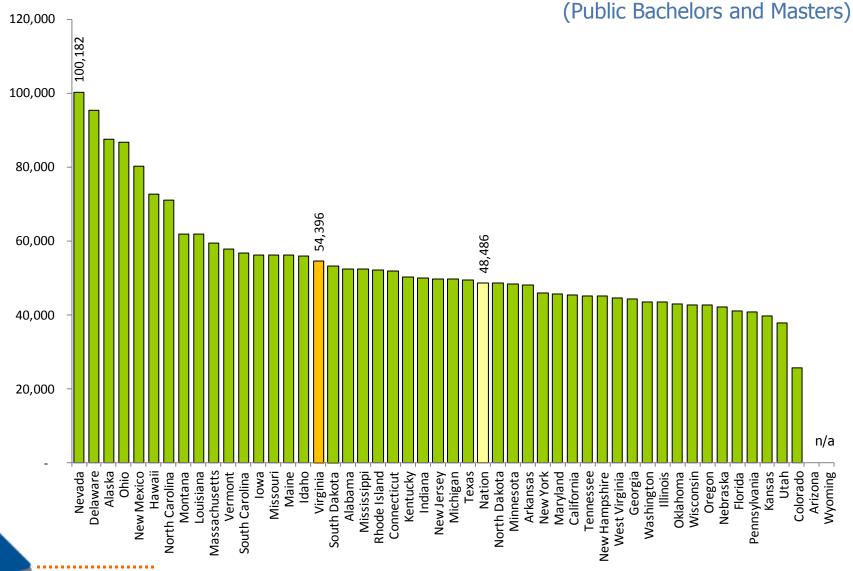


Sources: SHEEO State Higher Education Finance Survey 2008; NCES, IPEDS Completions Survey; U.S. Census Bureau,
American Community Survey (Public Use Microdata Samples)

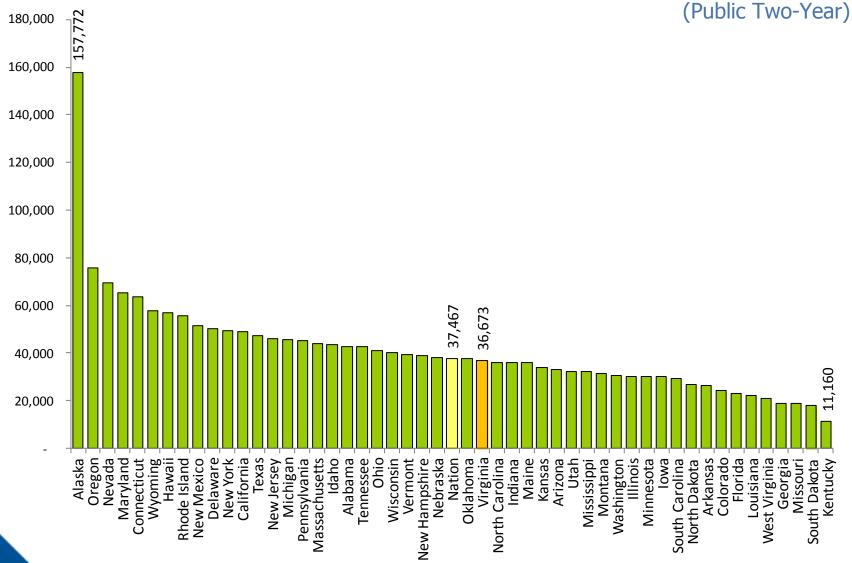
## Funding per Degree - Total Funding (State & Local, Tuition & Fee Revenues) per Credential/Degree Awarded



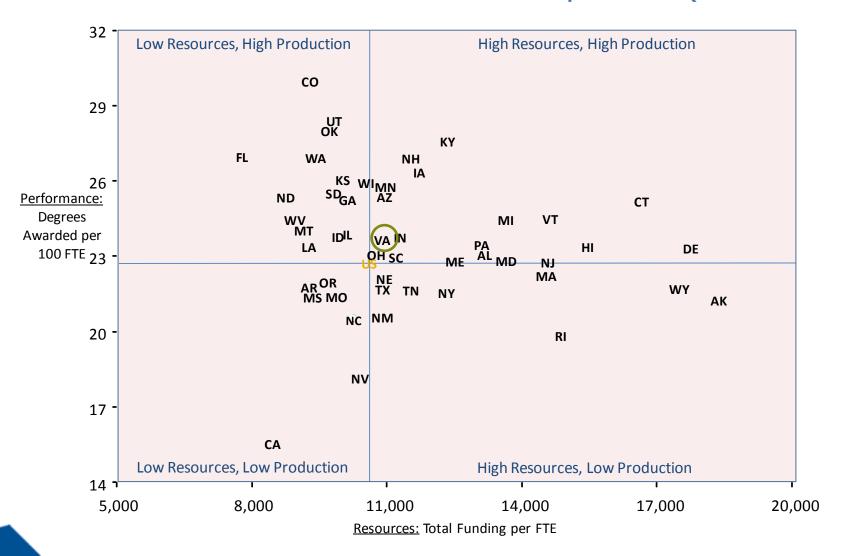
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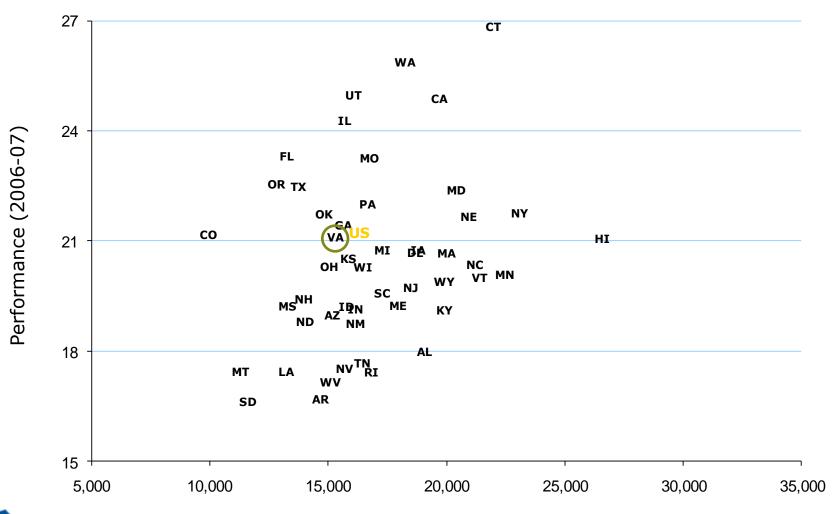
### Degrees & Certificates Awarded per FTE vs. Total Funding per FTE (2006-2007)





### Performance Relative to Funding: Bachelors Degrees Awarded per 100 FTE Undergraduates

(Public Research Institutions)

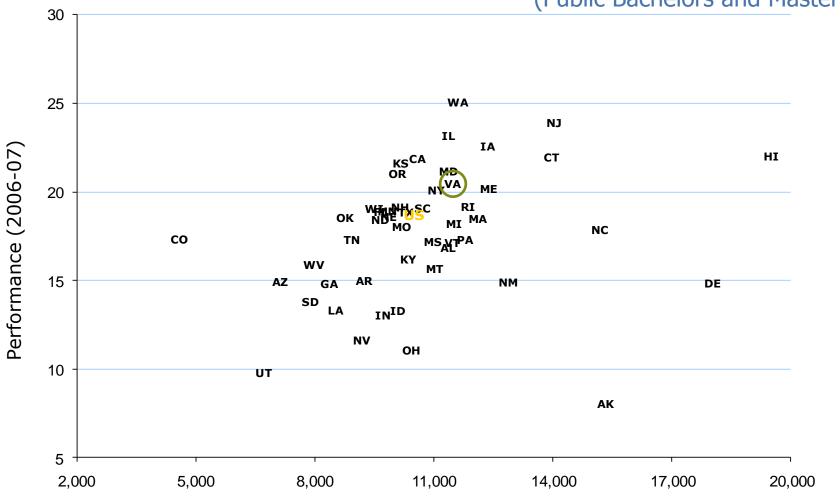






### Performance Relative to Funding: Bachelors Degrees Awarded per 100 FTE Undergraduates

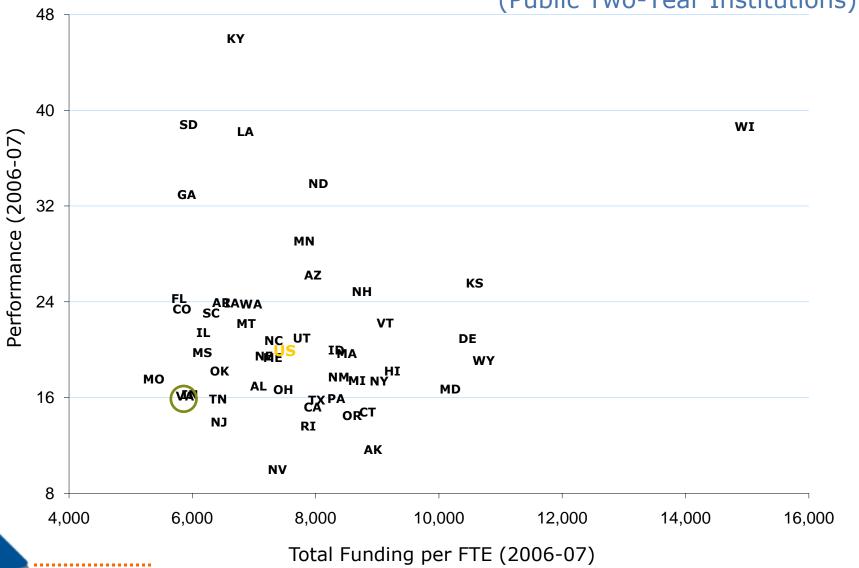
(Public Bachelors and Masters)



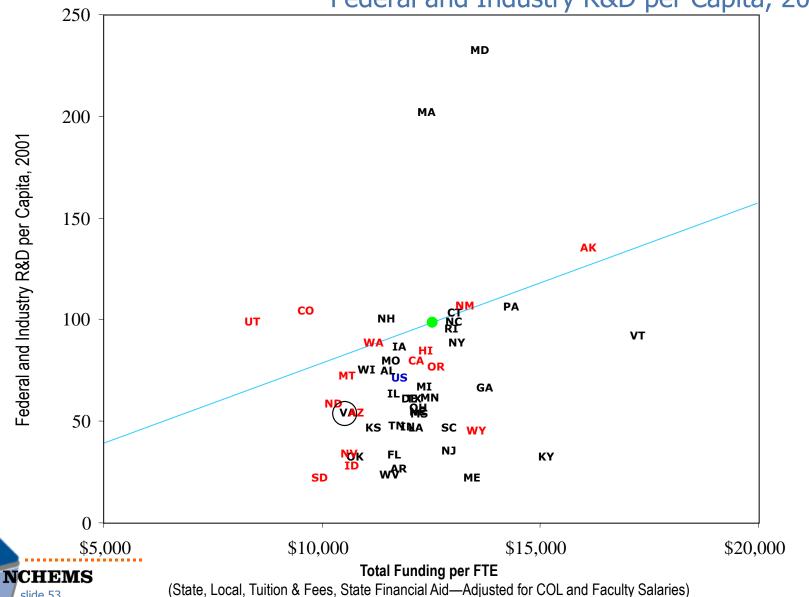
Total Funding per FTE (2006-07)



#### Performance Relative to Funding: All Credentials Awarded per 100 FTE Undergraduates (Public Two-Year Institutions)



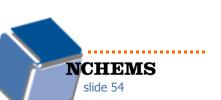
Performance Relative to Total Funding per FTE State **Higher Education Systems** Federal and Industry R&D per Capita, 2001



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Options to Improve Accessibility, Success, and Cost Effectiveness

### **TARGETS OF OPPORTUNITY**



### Targets of Opportunity

- Enhance degree and high-value certificate production in the VCCS
  - Improve curricular alignment with K-12
  - Develop a system-wide approach to developmental education
  - Develop accelerated certificate programs for returning adults
- Focus on access and success of minority males
- Develop specially targeted completion programs for adults who have attended college but not received a degree or certificate
- Enhance research competitiveness in one or two key areas



### Necessary Infrastructure Improvements

- Statewide student unit record tracking system linking
  - K-12
  - Postsecondary education
  - Workforce
- Strategic financing plan for higher education
- Add productivity measures to the accountability metrics used in the state

